

ABSTRACT OF THE DISCLOSURE

A spatio-temporal equalizer is described, for use with adaptive antenna arrays, in base stations of cellular systems, and in the presence of time-varying channels and/or non-stationary interferers. The beamforming coefficients and the coefficients of the decision feedback equaliser are jointly adapted, using a single error function, with processing based on Cholesky factorisation techniques. The processing proceeds from the midamble outwards, and is implemented as a systolic array.